NOTE II.

TWO NEW SPECIES OF THE GENUS HELOTA FROM BURMA [1]

DESCRIBED BY

C. RITSEMA Cz.

Among the *Helotidae* of Mr. A. Fry's collection, kindly sent to me for identification, there were two new species, both from Burma, one of which is very interesting on account of its being allied to the almost unknown *Helota thibetana* Westw. (*Mellii* Westw.) from Simlah, the type-specimen of which, a female from the old collection of Melly, belongs to the Natural History Museum at Geneva and was lent to me for comparison by the able Conservator of the named Museum, Mr. E. Frey-Gessner. As Westwood's descriptions of this species are very short (see Notes Leyd. Mus. Vol. XI, 1889, p. 110), I made use of this opportunity to describe the species at length; this description will be found at the end of the present Note.

The species of *Helota* contained in Mr. Fry's collection are the following:

Helota Vigorsii McLeay. 1 ♀, Java.
» *longipes* Rits. 2 ♂, Assam: Manipur (Doherty).
» *Oberthüri* Rits. 1 ♀, Assam: Patkai Mts (Doherty).
» *gemmata* Gorh. 3 ♀, Japan; 1 ♂ and 1 China bor. (Fortune).

---

[1] See also for the *Helota*-species of Burma: Ann. Mus. Civ. di Genova, vol. XXX, 1891, pp. 885 and 898, and Notes Leyd. Mus. Vol. XIII, 1891, p. 251.

Helota verrucosa, nov. spec. 1 ♂, Burma: Ruby Mines (Doherty); described in this Note.
» *rotundata* Rits. 2 ♀, Burma: Momeit (Doherty); described in this Note.
» *laevigata* Oberth. 1 ♂ and 1 ♀, India orient.
» *tibialis* Rits. 1 ♂, Assam: Manipur (Doherty).
» *Gestroi* Rits. 3 ♀, Burma: Karen M^{ts} (Doherty).
» *notata* Rits. 2 ♀, Burma: Ruby Mines (Doherty).
» *Fryi*, nov. spec. 2 ♂ and 1 ♀, Burma: Karen M^{ts} (Doherty); described in this Note.
» *fulvitarsis* Rits. 1 ♂, Burma: Ruby Mines (Doherty); 1 ♀, Assam: Patkai M^{ts} (Doherty).

Helota verrucosa, n. sp. ♂.

Allied to and resembling *Helota thibetana* Westw. (*Mellii* Westw.) of which the type-specimen, a female from Simlah, is before me. The new species differs, however, besides by the sexual characters, by the finer and closer punctuation on the elytra which agrees with that of the head and pronotum 1), by the more acutely crenulate lateral margins of the prothorax, and by the more strongly raised warts or tubercles on pronotum and elytra; on the elytra these warts are more irregularly placed in the new species than in *thibetana* where they are arranged in distinct rows; finally, in *thibetana* the sutural interstice is smooth and separated from the disk of the elytra by a row of deeply impressed punctures, whereas in *verrucosa* the sutural interstice is sculptured and separated from the disk by a very fine impressed line.

Length 9½ mm. — Above finely rugose in consequence of a very dense punctuation but provided with irregularly placed glossy warts or tubercles of different size and shape. The colour of the upper surface is coppery bronze (the

---

1) In *thibetana* the punctures on the elytra are slightly larger than those on the head and pronotum, and along the middle somewhat wider apart.

elytra spotted with green along the lateral margins), that of the tubercles bronze green, that of the scutellum bright metallic green; the antennae are testaceous, and the anterior portion of the sides of the pronotum as well as two pairs of convex roundish spots on the elytra (the anterior pair distinctly larger than the posterior one) flavous. — The under surface is flavous, with the head (except the throat), the sides of the sterna (except the anterior portion of those of the prosternum), and the elytral epipleurae, bronze green; the space between the anterior coxae shows a metallic green tinge, which is likewise the case with the coxae of the three pairs of legs; the trochanters are dark pitchy, the femora flavous with the apical portion dark pitchy with metallic green tinges on the knees, the tibiae flavous with the base and about the apical half dark pitchy, the tarsi pitchy brown with the base of the claw-joint and that of the claws themselves, flavous.

The head very densely punctured, the punctures somewhat finer on the narrowed front portion; on the disk between the eyes two slightly divergent longitudinal elevations; the green coloured mandibles finely but very distinctly punctured.

The prothorax broader at the base than long, narrowed in regularly curved lines towards the front margin which is curved backwards making the lateral angles slightly protruding; the base bisinuate, the middle lobe truncate, the lateral angles acute and slightly directed inwards; the lateral margins very distinctly crenulate, each with ten or eleven crenulations [1]). The upper surface very densely punctured and provided with more sparingly punctured raised patches or tubercles which are arranged in the same manner as in *sinensis* Oll. and *thibetana* Westw. but more strongly raised. The scutellum nearly circular, glossy, provided with a few large punctures, and broadly impressed along the middle.

---

1) In *thibetana* these crenulations are broader.

The elytra slightly narrowing towards the apices which are nearly conjointly rounded, narrowly dehiscent at the suture and provided with a very minute sutural tooth; the lateral margins are strongly serrate from the base to the apex. The elytra are very densely covered with punctures equal in size to those on the head and pronotum, and the sculptured sutural interstice is separated from the disk by a fine impressed line; they are provided, besides with the four convex flavous spots, with rather irregularly placed glossy tubercles of different size and shape, of which those on the inner half are larger than those on the outer half.

The under surface of the head (except the throat) is covered with deep punctures; on the sides of the prosternum the punctures are larger, wider apart and evanescent towards the front angles, the intercoxal part has raised lateral margins and an obsolete punctuation; the metallic coloured lateral portions of the metasternum are deeply punctured, the sparsely punctured flavous portion shows on both sides of the median line an elongate ovate somewhat oblique impression which is covered with an erect fulvous pubescence. The abdomen is very finely punctured, somewhat more strongly so at the sides; the basal ventral segment is about as long as the three following segments taken together, and provided on the middle with a large but shallow finely punctate impression, which is as broad as the distance between the posterior coxae and extends from the base down to two thirds of the length of the segment; this impression shows at its base a swollen transverse streak which is divided by a short longitudinal groove, whereas the posterior margin of the impression is angularly raised in the middle; the 2nd, 3rd and 4th segments are equal in length to each other; the 5th or last is as long as the two preceding segments, broadly rounded posteriorly and provided with a large but shallow impression which is distinctly punctured and thinly pubescent and occupies the whole length of the segment; the hinder margin of the apical dorsal segment has the shape of an accolade: ⏟. The dark coloured tip of the femora is strongly punctured, the tibiae very finely so; the anterior tibiae are curved and their inner margin, at a small distance from the apex, somewhat angularly enlarged, whereas a very minute dilatation is present on the outer margin between the first named dilatation and the middle of the tibia.

Hab. Burma: Ruby Mines (Doherty). — A single male specimen.

Helota rotundata Rits. ♀.

Agreeing with the ♂ 1), but the anterior tibiae but very slightly curved and the intermediate and posterior tibiae not constricted before the apex; the elytra separately rounded at the apices and provided with a very minute sutural tooth; the last ventral segment regularly rounded behind.

Hab. Burma; Momeit (Doherty). — Two specimens, one of which is now in the Leyden Museum.

Helota Fryi, n. sp. ♂ and ♀.

Resembling *Helota dubia* Rits. 2) and *affinis* Rits. 3) but broader, with the elytral spots differently placed (the 1st pair between the 3rd and 7th striae, the 2nd pair between the 3rd and 6th), and the apices of the elytra rounded in both sexes.

Length 9 mm. — Elongate, shining, above bronze green with faint coppery tinges; the antennae pale reddish testaceous with the terminal joint of the club infuscate; each elytron provided with two flavous spots which are narrowly surrounded with bluish black; the anterior spot is

---

1) Ann. Mus. Civ. di Genova, vol. XXX, 1891, p. 891.
2) Ann. Mus. Civ. di Genova, vol. XXX, 1891, p. 901.
3) Notes Leyd. Mus. vol. XIII, 1891, p. 253.

situated between the 3rd and 7th, the posterior one between the 3rd and 6th striae. Underneath the head (except the middle of the throat), the lateral portions of the prosternum and the elytral epipleurae are golden green, the rest is reddish testaceous with the apical margin of the last ventral segment pitchy; the legs are reddish testaceous, with the apex of the femora and the basal half of the tibiae [1]) metallic green, the extreme apex of the tibiae and the tarsi pitchy, the base of the claw-joint rufous.

Head strongly and densely punctured, on the narrowed front portion the punctures are much finer.

Prothorax slightly broader at the base than long, narrowing towards the front margin in nearly straight lines; the front margin straight, the front angles not at all prominent, subangular, the basal ones acute, the base bisinuate, the median lobe rounded. The pronotum strongly and rather densely punctured, the punctures larger and more widely separated towards the base; three smooth spaces at the base: one in the middle and two between the middle and the sides. The scutellum strongly transverse.

Elytra elongate, slightly narrowing towards the end and here separately rounded in both sexes. Each elytron with ten regular striae of punctures which become larger towards the sides; those interstices which join the apical margin are costate at the end.

Under surface of the head (except the middle of the throat) provided with large punctures, the metallic coloured lateral portions of the prosternum likewise strongly punctured, the middle portion much more finely; the elytral epipleurae, legs and abdomen apparently impunctate, with the exception of the apical ventral segment which is very finely punctured towards the posterior margin especially in the male.

♂. Anterior tibiae slightly curved, the inner margin

---

1) On the anterior tibiae the basal third only.

with a deep round notch on the apical half and enlarged at the end; the basal joints of the anterior tarsi slightly enlarged and densely fringed beneath with long colourless hairs; the inner margin of the posterior tibiae with a very minute angular tooth at some distance from the apex, and the space between the tooth and the apex finely pubescent; the intermediate and posterior tarsi very slender and elongate; the apical ventral segment very broadly rounded, almost subtruncate, posteriorly, and densely fringed with short pale coloured hairs.

♀. The legs simple and less elongate, the apical ventral segment slightly notched at the end.

Hab. Burma: Karen M^ts^ (Doherty). — Two males and one female. One of the males is now in the Leyden Museum.

List of the *Helota*-species known as yet from Burma.

Feae Rits. 2 ♀, Karen M^ts^ (Fea). — Genoa and Leyd. Museum.
ventralis Rits. 2 ♀, Ruby Mines (Doherty). — Coll. Oberthür and Leyd. Mus.
verrucosa Rits. 1 ♂, Ruby Mines (Doherty). — Coll. Fry.
curvipes Oberth. 1 ♀ Karen M^ts^ (Fea). — Genoa Museum.
Dohertyi Rits. 1 ♂, Ruby Mines (Doherty). — Coll. Oberthür.
serratipennis Rits. 2 ♂ and 4 ♀, Karen M^ts^ (Fea). — Genoa and Leyd. Mus.
rotundata Rits. 1 ♂, Karen M^ts^ (Fea); 2 ♀, Momeit (Doherty). — Genoa Mus., coll. Fry and Leyd. Mus.
Gestroi Rits. 1 ♂, Karen M^ts^ (Fea); 1 ♀, Ruby Mines (Doherty) and 3 ♀, Karen M^ts^ (Doherty). — Genoa Mus., coll. Oberthür, coll. Fry and Leyd. Mus.
notata Rits. 7 ♀, Ruby Mines (Doherty). — Coll. Oberthür, Leyd. Mus. and coll. Fry.
dubia Rits. 1 ♀, Ruby Mines (Doherty). — Coll. Oberthür.
affinis Rits. 1 ♀, Ruby Mines (Doherty). — Coll. Oberthür.
Fryi Rits. 2 ♂ and 1 ♀, Karen M^ts^ (Doherty). — Coll. Fry and Leyd. Mus.

immaculata Rits. 4 ♂ and 8 ♀, Karen M^ts^ (Fea). — Genoa and Leyd. Mus.
difficilis Rits. 2 ♂, Karen M^ts^ (Fea). — Genoa and Leyd. Mus.
fulvitarsis Rits. 1 ♂, Ruby Mines (Doherty). — Coll. Fry.

Finally I may conclude with an ample description of

Helota thibetana Westw. ♀.

Helota thibetana Westwood, Ann. and Mag. of Nat. Hist. Vol. VIII, 1842, p. 123 [1]. — Ritsema, Stettin. Ent. Zeit. 1876, p. 19. — Olliff, Cist. Ent. Vol. III, pp. 54 and 56 (1883). — Ritsema, Notes Leyd. Mus. Vol. XI, 1889, p. 110; vol. XIII, 1891, p. 226.
Helota Mellii Westwood, Cabin. of Orient. Entom. p. 86; pl. 41, fig. 8, ♀ (1848). — Ritsema, Notes Leyd. Mus. Vol. XI, 1889, p. 110.

Length 9¼ mm. — The upper surface rugose, more distinctly on the outer half of the elytra than along the middle, coppery bronze, the elytra indistinctly bordered with green at the sides, and provided, besides with four small convex flavous round spots, with rows of glossy black tubercles of different size and shape; the mandibles greenish bronze; the antennae fulvous, their basal joint and the 1st joint of the club palest, the two apical joints of the club infuscate; the extreme tip of the anterior angles of the pronotum fulvous. — The under surface is pale fulvous; the head (except the throat), the sides of the sterna (except the tip of the anterior angles of the prosternum) and the elytral epipleurae, bronze green; the space between the anterior coxae shows a metallic green tinge, which is also the case with the pitchy brown coxae of the three pairs of legs; the trochanters are brown, the femora pale fulvous with the apex dark pitchy and with a bronze green hue on the knees, the tibiae alternately pitchy brown and pale fulvous which colours are, however, not sharply defined; the tarsi dark brown with the base of the claw-joint and that of the claws themselves pale fulvous.

---

[1] Published in October 1841.

Head strongly punctured except on the clypeus where the punctures are finer; on the disk, between the eyes, an indistinct U-shaped elevation which has the open side directed towards the clypeus; the mandibles are finely and closely punctured.

Prothorax broader at the base than long, narrowed and emarginate in front, bisinuate at the base where the acute lateral angles are directed inwards in consequence of the regularly curved sides which are very coarsely crenulate, each of them having 8 or 9 crenulations, the middle lobe subtruncate; the anterior angles protruding; the upper surface rugosely punctured and provided with some more sparingly punctured raised patches and glossy tubercles which are arranged quite as in *Helota sinensis* Olliff. The scutellum strongly transverse.

Elytra widest at some distance behind the shoulders, then slightly narrowing and, near the apex, more suddenly narrowed in a concave line; the apices are dehiscent at the suture and acutely pointed; the lateral margins, especially at the apical third, minutely and distantly serrulate. The elytra are strongly and closely punctate all over, more closely, however, on the outer half than along the middle where the punctures are moreover somewhat larger than on the head and pronotum; the sutural interstice is impunctate and accompanied by a regular stria of small but deeply impressed punctures; the elytra are provided, besides with four small convex flavous round spots, with several more or less roundish or narrow and elongate glossy black tubercles of different size, arranged on each elytron in six longitudinal rows of which the first (that on the scutellar region) is very short; the convex flavous spots, which are nearly equal in size to each other, are situated in the 3rd row; near to the lateral margins the tubercles are very narrow, elongate and more strongly raised; the acute apices have each a sharply raised keel along the middle, which is the continuation of the second row of tubercles.

The under surface of the head (except the throat where it is impunctate) covered with strong punctures which are more closely set on the lateral portions; the sides of the prosternum strongly but not closely punctured, the middle portion more finely so, the space between the anterior coxae bounded laterally by an oblique raised margin; the metasternum with a few large punctures on the sides and some very minute ones on the middle; along the middle an impressed line is present which is broader and deeper on the apical half; the elytral epipleurae have a few fine punctures near the base; the ventral segments are very finely punctured, somewhat more strongly so at the sides; the basal segment is slightly longer than the 2nd and 3rd together, the 2nd and following ones equal in length to each other; the apical one broadly rounded and with a semi-ovate impression at the end, the hinder margin of this impression straight; at the base of the first ventral segment between the posterior coxae, a few larger punctures and longitudinal scratches may be observed. The dark coloured tips of the femora are strongly, the tibiae very finely punctured; the anterior tibiae are nearly straight.

The above described specimen, a female, the only one I have seen, belongs to the Geneva Museum, where it forms part of the late A. Melly's collection. It is said to be the type-specimen of *Helota Mellii* Westw. which came from Simlah. Westwood says (Cab. Or. Ent. *l. c.*) »Simlah, in Thibet", but this is certainly a mistake. Simlah is situated in the Province Punjab (N. W. Hindostan). — About the identity of *H. thibetana* and *Mellii* there can be, I believe, no doubt.

Leyden, July 1893.